



A10- 0006

November 2, 2000

ER060:PH

Bill Glasser
Innovation Manager, CHM
USEPA Region 10
Mail Stop OI-085
1200 Sixth Avenue
Seattle, WA 98101
Glasser.william@epa.gov

Re: Wacker Siltronic Corporation EPA Performance Track application

Dear Mr. Glasser,

Per your request we have attached the updated Performance Track application to include the responses to your October 23, 2000 e-mail.

If I can supply any additional information please contact me at (503) 219-4469.

Very truly yours,

WACKER SILTRONIC CORPORATION

Petra Hoy
Environmental Engineer

Attachments: Updated NEAT application

cc: Performance Track Information Center
NEAT File

A10-0006



***National
Environmental
Achievement Track***

Application Form

Wacker Siltronic Corporation

Name of facility

Name of parent company (if any)

7200 NW Front Avenue

Street address

Street address (continued)

Portland, OR 97210-3676

City/State/Zip code

Give us information about your contact person for the
National Environmental Achievement Track Program.

Name Petra Hoy

Title Environmental Engineer

Phone (503) 219-4469

Fax (503) 219-7599

E-mail petra_hoy@siltronic.com

Why do we need this information?

EPA needs background information on your facility to evaluate your application.

What do you need to do?

- Provide background information on your facility.
- Identify your environmental requirements.

Section A

Tell us about your facility.

1 What do you do or make at your facility?

Silicon wafer manufacturer and supplier to semiconductor industry.

See Attachment A Company Background and History

2 List the Standard Industrial Classification (SIC) code(s) or North American Industrial Classification System (NAICS) codes that you use to classify business at your facility.

SIC
3674

NAICS

3 Does your company meet the Small Business Administration definition of a small business for your sector?

☐ Yes ☒ No

4 How many employees (full-time equivalents) currently work at your facility?

- ☐ Fewer than 50
☐ 50-99
☐ 100-499
☐ 500-1,000
☒ More than 1,000

Section A, continued

5 Does your facility have an EPA ID number(s)?

☒ Yes

☐ No

If yes, list in the right-hand column.

ORD 096 253 737

6 Identify the environmental requirements that apply to your facility. Use the Environmental Requirements Checklist, at the back of the instructions, as a reference. List your requirements to the right **or** enclose a completed Checklist with your application.

WSC is an ISO 14001 certified company. All Legal and Regulatory requirements are identified as part of the Environmental Management System (EMS).

See Attachment B Legal and other Requirements Matrix

7 Check the appropriate box in the right-hand column.

☒ I've listed the requirements above.

☐ I've enclosed the Checklist with my application.

8 Optional: Is there anything else you would like to tell us about your facility?

WSC has a long history of environmental achievement based on Design for the Environmental principles and ISO 14001 environmental objectives and targets.

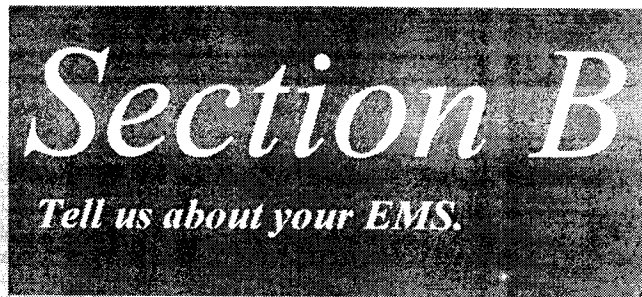
See Attachment C for a description of WSC's Environmental Performance

Why do we need this information?

Facilities must have an operating Environmental Management System (EMS) that meets certain requirements.

What do you need to do?

- Confirm that your EMS meets the Achievement Track requirements.
- Tell us if you have completed a self-assessment or have had a third-party assessment of your EMS.



1 Check **yes** if your EMS meets the requirements for each element below as defined in the instructions.

- | | |
|-----------------------------------|---|
| a. Environmental policy | <input checked="" type="checkbox"/> Yes |
| b. Planning | <input checked="" type="checkbox"/> Yes |
| c. Implementation and operation | <input checked="" type="checkbox"/> Yes |
| d. Checking and corrective action | <input checked="" type="checkbox"/> Yes |
| e. Management review | <input checked="" type="checkbox"/> Yes |

2 Have you completed at least one EMS cycle (plan-do-check-act)? ☒ Yes

3 Did this cycle include both an EMS and a compliance audit? ☒ Yes

4 Have you completed an objective self-assessment or third-party assessment of your EMS? ☒ Yes

If yes, what method of EMS assessment did you use?

☐ Self-assessment

☐ GEMI

☐ Other

☐ CEMP

☒ Third-party assessment

☒ ISO 14001 Certification

☐ Other Attachment D Environmental

Policy. Attachment E ISO 14001

Certificate

Why do we need this information?

Facilities must show that they are committed to improving their environmental performance. This means that you can describe past achievements and will make future commitments.

What do you need to do?

Refer to the Environmental Performance Table in the instructions to answer questions 1 and 2.

Section C

Tell us about your past achievements and future commitments.

- 1** Describe your past achievements for at least two environmental aspects. If you need more space than is provided, attach copies of this page.

Note to small facilities: If you qualify as a small facility as defined in the instructions, you are required to report past achievement for at least one environmental aspect.

First aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Reduce Solid Waste	2.01	pounds per unit (production)	1.78	pounds per unit (production)
<p>i. How is the current level an improvement over the previous level?</p> <p>Please see Attachment F for a complete listing of WSC's Environmental Objectives, Targets and Projects.</p> <p>First Aspect: Over 11% reduction in generation of solid waste per unit production. Also see Attachment G Solid Waste Reduction</p> <p>ii. How did you achieve this improvement?</p> <p>Increased recycling and focused projects to reduce consumables.</p> <p>In 1999 Wacker Siltronic Corporation's recycling program diverted 991 tons of material from the landfill. WSC's largest solid waste is sludges and wastewater treatment residues. In September 1999 a significant pollution prevention project was implemented by adding these sludges to the recycling program. The recycling of sludges is anticipated to achieve a recycling rate of over 65% in 2000 and annually divert an additional 900 tons of material from the landfill.</p>				

Second aspect you've selected

What aspect have you selected?	What was the previous level (2 years ago)?		What is the current level?	
	Quantity	Units	Quantity	Units
Resource Recovery of Silicon Carbide	0	tons	120	tons
<p>i. How is the current level an improvement over the previous level?</p> <p>In 1999, after three years of research and development, a silicon carbide slurry recycling system was implemented that resulted in 90% resource recovery back to the process as well as spectacular solid and liquid waste reductions. See Attachment I.</p>				
<p>ii. How did you achieve this improvement?</p> <p>This project was successful through a partnership with: the Oregon Department of Environmental Quality; the city of Portland's Bureau of Environmental Services, WSC; and the Environmental Assistance Project. Working cooperatively with the Design for the Environment strategy 120 tons per year of silicon carbide abrasive is reused to regenerate slurry used in the wire saw operation. Additional pollution prevention from this project includes the elimination of 36 tons of solvent air emissions as well as a reduction in water use of 37 million gallons per year.</p>				

- 2 Select at least four environmental aspects (no more than two from any one category) from the Environmental Performance Table in the instructions and then tell us about your future commitments. If you need more space than is provided, attach copies of this section.

Note to small facilities: If you are a small facility, you are required to make commitments for at least two environmental aspects in two different categories.

First aspect you've selected

a. What is the aspect? Reduce Solid Waste

b. Is this aspect identified as significant in your EMS? ☒ Yes ☐ No

c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.

<input type="checkbox"/> Option A: Absolute value	(Quantity/Units)
<input checked="" type="checkbox"/> Option B: In terms of units of production	1.78 (Quantity/Units)

- or output
- d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.
- ☐ Option A:
Absolute value (Quantity/Units)
- ☒ Option B:
In terms of units of production or output < 1.78. Stretch goal of 1.40 (Quantity/Units)
- e. How will you achieve this improvement?
- Reduce solid waste to less than 1.78 pounds per unit and recycle at least 50% of all solid waste. Our stretch goal is to generated equal to or less than 1.40 pounds of solid waste per unit of production which would equate to an additional 20% reduction in solid waste. These improvements will be achieved through increased awareness of recycling programs and focused projects to reduce consumables.

Second aspect you've selected

- a. What is the aspect?
- Habitat Impacts. Enhancement of habitat including wetlands and riparian areas.
- b. Is this aspect identified as significant in your EMS?
- ☒ Yes ☐ No
- c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.
- ☒ Option A:
Absolute value Completed riverbank restoration project. (Quantity/Units)
- ☐ Option B:
In terms of units of production or output (Quantity/Units)
- d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.
- ☒ Option A:
Absolute value Complete project to enhance habitat / wetland, riparian area. (Quantity/Units)
- ☐ Option B:
In terms of units of production or output (Quantity/Units)
- e. How will you achieve this improvement?
- WSC is committed to a project concerning the riparian enhancement project located at the Children's Arboretum, Portland OR. The project includes site preparation, tree and shrub planting, and maintenance on approximately 1.3 acres of riparian and upland areas near the Columbia Slough or its tributaries. WSC funded the project in full. The project site is publicly owned and surrounds a waterway which is a tributary to the Columbia Slough. The primary goal of the project is to improve water quality by shading and

buffering water bodies with vegetation.

While the riverbank project is complete, Wacker maintains an ongoing commitment to the maintenance of the riverbank and all onsite landscaping. Wacker Siltronic Corporation is also committed to minimizing the use of fertilizers and herbicides.

WSC's future commitment and long-term goal is to develop off-site riparian areas in partnership with the community. WSC has entered into the offsite riparian enhancement project located at the Children's Arboretum in Portland, OR. This project will improve water quality and includes a five-year commitment to maintaining the riparian habitat.

Third aspect you've selected

- a. What is the aspect? Reduce emissions of VOC's from Polishing process.
- b. Is this aspect identified as significant in your EMS? ☒ Yes ☐ No
- c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.
- | | |
|---|---|
| <input checked="" type="checkbox"/> Option A:
Absolute value | 4,550 pounds of VOC from Polishing (Quantity/Units) |
| <input type="checkbox"/> Option B:
In terms of units of production or output | (Quantity/Units) |
- d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.
- | | |
|---|---|
| <input checked="" type="checkbox"/> Option A:
Absolute value | 3,640 pounds of VOC from Polishing (Quantity/Units) |
| <input type="checkbox"/> Option B:
In terms of units of production or output | (Quantity/Units) |
- e. How will you achieve this improvement? Process modification to reduce consumption of VOC based wax by an estimated 20%.

Fourth aspect you've selected

- a. What is the aspect? Resource recovery of Silicon Carbide
- b. Is this aspect identified as significant in your EMS? ☒ Yes ☐ No
- c. What is the current level? You may choose to state this as an absolute value or in terms of units of production or output.
- | | |
|---|----------------------------------|
| <input checked="" type="checkbox"/> Option A:
Absolute value | 120 tons of SiC (Quantity/Units) |
| <input type="checkbox"/> Option B:
In terms of units of production or output | (Quantity/Units) |
- d. What is the improvement you are committing to over the next three years? You may choose to state this as an absolute value or in terms of units of production or output.
- | | |
|---|----------------------------------|
| <input checked="" type="checkbox"/> Option A:
Absolute value | 250 tons of SiC (Quantity/Units) |
| <input type="checkbox"/> Option B:
In terms of units of production or output | (Quantity/Units) |

e. How will you achieve this improvement?

Continuous process improvement of silicon carbide recycling system.

Why do we need this information?

Facilities must demonstrate their commitment to public outreach and performance reporting. You should have appropriate mechanisms in place to identify community concerns, to communicate with the public, and to provide information on your environmental performance.

Section D

Tell us about your public outreach and reporting.

What do you need to do?

- Describe your approach to public outreach.
- List three references who are familiar with your facility.

1 How do you identify and respond to community concerns?

WSC's Environmental Policy is communicated to all employees. Copies of the policy are also available to employees, visitors and the public, at each security desk and will be sent to stakeholders upon request. Persons interested in Wacker's programs or requesting information are initially directed to the Director of Human Resources. Responses to inquiries are prepared and/or reviewed by the area management and provided to the interested party.

2 How do you inform community members of important matters that affect them?

Facility tours are conducted by the Training Department to increase understanding of how the facility operates and improve community relations.

Additionally, stakeholder concerns are included in the Aspect Analysis.

See Attachment I for Voluntary Environmental Programs WSC participates in.

Public Outreach and Reporting: WSC keeps informed of community interests by participating in Voluntary Environmental Programs and organizations (Attachment I). Generally, these activities are a mix of sharing our expertise with others to help build strong environmental programs in the community, participating in an advisory capacity on community or individual issues along side regulators and members of the public.

Finally, we encourage our employees to become aware of their impact on the environment and to get involved to help reduce our impacts so that together we can build sustainable business practices.

Community concerns or questions are addressed through Wacker's External Communication Procedure. Persons interested in Wacker's programs or information are initially directed to the Director of Human Resources to assure the question is channeled to the best person in the organization who can provide the information. For example, environmental questions are referred to the Environmental Management Representative for review and response.

Documentation of requests for environmental information and external responses for environmental issues is kept in the Environmental Records, the Correspondence Log and/or the External Communication Log database.

3 How will you make the Achievement Track Annual Performance Report available to the public?

☒ Website www.wacker-siltronic.com (under development)

☐ Newspaper

☐ Open Houses

☒ Other

International environmental report of environmental performance at all Wacker sites worldwide.

4 Are there any ongoing citizen suits against your facility?

☐ Yes

☒ No

If yes, describe briefly in the right-hand column.

5 List references below

	Organization	Name	Phone number
Representative of a Community/ Citizen Group	Zero Waste Alliance	Larry Chalfan	(503) 279-9381
	NW Earth Institute	Dick Roy	(503) 227-2807
	Oregon Natural Step Network	Jeanne Roy	(503) 244-0026

<i>State/Local Regulator</i>	Department of Environmental Quality	Marianne Fitzgerald	(503) 229-5946
<i>Other community/local reference</i>	City of Portland, Bureau of Environmental Services	Margaret Nover	(503) 823-7623

Section E

Application and Participation Statement.

On behalf of Wacker Siltronic Corporation
[my facility],

I certify that

- I have read and agree to the terms and conditions, as specified in the *National Environmental Achievement Track Program Description* and in the *Application Instructions*;
- I have personally examined and am familiar with the information contained in this Application (including, if attached, the Environmental Requirements Checklist). The information contained in this Application is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete, and I have no reason to believe the facility would not meet all program requirements;
- My facility has an environmental management system (EMS), as defined in the Achievement Track EMS requirements, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;
- My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements, and the facility has corrected all identified instances of potential or actual noncompliance;
- Based on the foregoing compliance assessment and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environmental Achievement Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior facility manager and fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is applying to this program.

Signature/Date Thomas C. McCue 11/2/2000

Printed Name/Title Thomas C. McCue / Environmental Manager

Facility Name Wacker Siltronic Corporation

Facility Street Address 7200 NW Front Street Portland, OR 97210-3676

Facility ID Numbers ORD 096 253 737

ATTACHMENT B

Legal and Other Requirements Matrix

Appendix 1 - Legal And Other Requirements Matrix

Appendix page 1 of 4

U.S. Federal Environmental Laws:

- Clean Air Act (CAA) and CAA Amendments of 1990
- Water Pollution Control Act as amended by the Clean Water Act (CWA) of 1977
- Resource Conservation and Recovery Act (RCRA)
- Comprehensive Environmental Response Compensation and Liability Act (CERCLA)
- Emergency Planing and Community Right-to-Know Act (EPCRA)
- Toxic Substance Control Act (TSCA)
- Hazardous Materials Transportation Act (HMTA) of 1974 as amended by the Hazardous Transportation Uniform Safety Act (HMTUSA) of 1990

U.S. Federal Environmental Regulations:

<i>CERCLA/EPCRA Title</i>	<i>Location Number</i>
• EPA designation, reportable quantities, and notification requirements for hazardous substances	40 CFR 302
• EPA regulations for emergency planning and notification	40 CFR 355
• EPA hazardous chemical reporting and community right-to-know requirements	40 CFR 370
• EPA toxic chemical release reporting regulations	40 CFR 372
<i>AIR</i>	
• EPA regulations on primary and secondary National Ambient Air Quality Standards (NAAQS)	40 CFR 50
• EPA regulations on National Emissions Standards for Hazardous Air Pollutants (NESHAP's)	40 CFR 61
• EPA regulations on NESHAPs for source categories	40 CFR 63
• EPA regulations on state operating permit programs	40 CFR 70
• EPA regulations on permits	40 CFR 72
• Stratospheric ozone protection regulations	40 CFR 82

Appendix 1 – Legal And Other Requirements Matrix

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WATER

- EPA regulations on discharge of oil 40 CFR 110
- EPA regulations on oil pollution prevention 40 CFR 112
- EPA regulations on designation of hazardous substances 40 CFR 116
- EPA regulations on determination of reportable quantities for hazardous substances 40 CFR 117
- EPA National Pollutant Discharge Elimination System (NPDES) permit regulations 40 CFR 122
- NPDES regulations 40 CFR 125
- EPA toxic pollutant effluent standards 40 CFR 129
- EPA general provisions for effluent guidelines and standards 40 CFR 401
- Pretreatment standard 40 CFR 403
- Wastewater discharge limitations 40 CFR 469

SOLID AND HAZARDOUS WASTE

- EPA general regulations for hazardous waste management 40 CFR 260
- EPA regulations for identifying hazardous waste 40 CFR 261
- EPA regulations for hazardous waste generators 40 CFR 262
- EPA regulations for lead-acid battery recycle 40 CFR 266
- EPA regulations on land disposal restrictions 40 CFR 268
- EPA standards for universal waste management 40 CFR 273
- EPA standards for managing used oil 40 CFR 279

OTHER

- EPA Guidelines Establishing Test Procedures for the Analysis of Pollutants 40 CFR 136
- EPA Hazardous Materials Handling and Transportation 40 CFR 172
- EPA /DOT transportation of hazardous substances 49 CFR 172

Appendix 1 – Legal And Other Requirements Matrix

Appendix page 3 of 4

State of Oregon Department of Environmental Quality Statutes and Rules

• Oregon pollution control tax credits	OAR 340-016
• Oregon general emission standards for particulate matter	OAR 340-021
• Oregon general gaseous emissions	OAR 340-022
• Oregon control of ozone depleting chemicals	OAR 340-022
• Oregon air pollution emergencies	OAR 340-027
• Oregon stationary source air pollution control and permitting procedures	OAR 340-028
• Oregon air pollution control standards for air purity and quality	OAR 340-031
• Oregon hazardous air pollutants	OAR 340-032
• Oregon noise control regulations	OAR 340-035
• Oregon groundwater quality protection	OAR 340-040
• Oregon water pollution	OAR 340-041
• Oregon regulations pertaining to NPDES permits	OAR 340-045
• Oregon regulations pertaining to oil spills in public waters	OAR 340-047
• Oregon certification of compliance with water quality requirements and standards	OAR 340-048
• Oregon hazardous waste management system, general	OAR 340-100
• Oregon standards applicable to generators of hazardous waste	OAR 340-102
• Oregon spills and other incidents	OAR 340-108
• Oregon used oil management rules	OAR 340-111
• Oregon universal waste regulations	OAR 340-113
• Oregon toxics use reduction and hazardous waste reduction regulations	OAR 340-135
• Oregon solid waste management statute	ORS 459
• Oregon reuse and recycling	ORS 459a
• Oregon hazardous waste and hazardous materials I	ORS 465
• Oregon hazardous waste and hazardous materials II	ORS 466
• Oregon air quality	ORS 468a
• Oregon water quality	ORS 468b

Other:

- Bureau of Environmental Services Administrative Rules
- Chapter 17.34 of the City of Portland Code
- Responsible Care

Appendix 1 - Legal And Other Requirements Matrix

Appendix page 4 of 4

<i>Permit Title</i>	<i>Permit Number</i>
National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit.	1200-Z
National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit.	101128
Municipal Pretreatment Program Wastewater Discharge Permit (City of Portland Bureau of Environmental Services)	469-001
Air Contaminant Discharge Permit	26-3002